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6 implanting a first pocket implant into the semiconductor substrate from a
7 first side of the gate; and
8 implanting a second pocket implant into the semiconductor substrate from
9 a second side of the gate,
10 wherein the first pocket implant and the second pocket implant are in
11 contact at about the center of a channel region.

D 2

MUR2 >
31. (Amended) The method of claim 28 wherein the diffusing
increases a reverse short channel effect of the transistor.

D 3

MUR2 >
38. (Amended) A method of fabricating a transistor in an integrated
circuit device comprising:
1 providing a semiconductor substrate having a surface;
2 forming a gate oxide on the semiconductor substrate surface;
3 forming a gate on the gate oxide;
4 implanting a first pocket implant into the semiconductor substrate from a
5 first side of the gate at an angle;
6 implanting a second pocket implant into the semiconductor substrate from
7 a second side of the gate at an angle; and
8 diffusing the first and second pocket implants laterally such that a
9 threshold voltage of the transistor is increased.
10
11

D 4

MUR2 >
42. (New) A method of fabricating a transistor in an integrated
circuit device comprising:
1 providing a semiconductor substrate having a surface;
2 forming a gate oxide on the semiconductor substrate surface;
3 forming a gate on the gate oxide;
4 implanting a first pocket implant into the semiconductor substrate from a
5 first side of the gate at an angle;

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8 ~~implanting a second pocket implant into the semiconductor substrate from~~
9 ~~a second side of the gate at an angle; and~~
10 ~~diffusing the first and second pocket implants laterally,~~
11 ~~wherein the diffusing increases a reverse short channel effect of the~~
12 transistor.

1 43. (New) The method of claim 42 wherein the diffusing
2 increases a threshold voltage of the transistor.

1 44 (New) The method of claim 42 further comprising
2 implanting an enhancement implant in the semiconductor substrate.

D4